IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of Stamires et al.	:	Docket No.: ACH2852US
Application No.: 10/071,386	:	Group Art Unit: 1725
Filed: February 7, 2002	:	Examiner: Christina Ildebrando
For: PROCESS FOR THE PREPARATION OF ANIONIC CLAY AND BOEHMITE-CONTAINING COMPOSITIONS	:	

Mail Stop: Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

RESPONSE UNDER 37 CFR § 1.111

Sir:

This is in response to an Office Action mailed on May 21, 2003, rejecting instant claims 1-22, which are all the claims pending in the present application.

In the Claims

Please amend the claims as indicated on the attached.

REMARKS

Rejections under 35 USC § 112

Applicants take strong exception to the Examiner's position that the limitation "anionic clay and boehmite-containing composition" renders the instant claims indefinite because it is not clear how the anionic clay and boehmite containing composition is formed. In particular, the Examiner questions whether the boehmite is formed in situ or is as added as the alumina source. In fact, the instant claims are quite definite in view of the instant specification.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First-Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on:

September 18, 2003
Date

Diane L. Moxley

Suitable alumina sources that may be employed in the process of the invention are listed on page 7, lines 12-16. These are (thermally treated) aluminum trihydrate, aluminum sols, gels, quasi-crystalline boehmite, microcrystalline boehmite, aluminum salts, and mixtures thereof. It is obvious that if the source of alumina is a non-boehmite, the boehmite must be formed in-situ (see also page 6, lines 5 and 6, i.e. the boehmite is formed from an aluminum source during aging).

On the other hand, it is clear that if the alumina source is boehmite, the boehmite need not be formed in-situ.

The anionic clay must be formed in the course of the instant process (in-situ), because there is no other means specified.

Rejections under 35 USC § 102 and 103

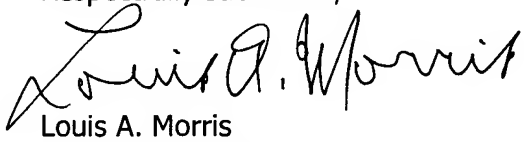
The rejection of claims 14 and 17-22 has been obviated in view of cancellation of those claims.

Claims 15 and 16 now incorporate the subject matter of claim 1, which renders them patentable in view of the patentability of claim 1.

CONCLUSION

Applicants are grateful for indication by the Examiner of the allowability of claims 1-13 if rewritten or amended to overcome the rejection(s) under 35 USC § 112. However, in view of the above remarks, such amendment is not necessary. Since all other grounds for rejection have been obviated, allowance of the instant claims is respectfully requested.

Respectfully submitted,



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1. (original) A process for the preparation of an anionic clay and boehmite-containing composition wherein a precursor mixture comprising a divalent metal source and a trivalent metal source is subjected to at least two aging steps and wherein at least once between two aging steps an aluminum source is added.

2. (original) The process according of claim 1 wherein the first aging step is conducted at a higher temperature than a following aging step.

3. (original) The process of claim 2 wherein the first aging step is conducted under hydrothermal conditions and a following aging step under non-hydrothermal conditions.

4. (original) The process of claim 1 wherein the first aging step is conducted at lower temperature than a following aging step.

5. (original) The process of claim 4 wherein the first aging step is conducted under non-hydrothermal conditions and a following aging step under hydrothermal conditions.

6. (original) The process of claim 1 wherein at least two of the aging steps are conducted at a different pH.

7. (original) The process of claim 1 wherein the aluminum source added between two aging steps is aluminum trihydrate or a thermally treated form thereof.

8. (original) The process of claim 1 wherein at least once between two aging steps a drying step is conducted.

9. (original) The process of claim 1 conducted in a continuous mode.

10.(original) The process of claim 1 wherein the divalent metal source is an oxide, hydroxide, carbonate of hydroxy carbonate of magnesium, copper, or zinc.

11.(original) The process of claim 1 wherein the trivalent metal source is an oxide or hydroxide of Al, Ga, Fe, La, or Ce.

12.(original) The process of claim 1 wherein additives are present during at least one of the aging steps.

13.(original) The process of claim 1 wherein the anionic clay and boehmite-containing composition is subjected to an ion-exchange treatment.

14.(cancelled)

15. (currently amended) A process for the preparation of a solid solution and/or spinel-containing composition, wherein the anionic clay and boehmite-containing composition ~~of~~ prepared in accordance with the process of claim ~~14~~1 is subjected to a heat-treatment at a temperature between 300 and 1200 °C.

16. (currently amended) A process for the preparation of an anionic clay-containing composition, wherein the anionic clay and boehmite-containing composition prepared in accordance with the process of claim ~~14~~1 is subjected to a heat-treatment at a temperature between 300 and 1200 °C to form a solid solution-containing composition, and the latter composition is rehydrated to form an anionic clay-containing composition.

17-22 (cancelled) .